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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			CAPUTO, LISA M	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,047

Applicant(s)

LU ET AL.

Examiner

Lisa M Caputo

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference numbers 65 (page 6, line 22) and 95 (page 9, line 4) appear in the specification but do not appear in the Figures.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the word "comprising" appears (a legal term). Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The disclosure is objected to because of the following informalities:

Regarding page 5, line 16: Please replace the "XXXXX" place-markers with appropriate words.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle (U.S. Patent No. 5,497,140) in view of Conwell et al. (U.S. Patent Application Publication 2002/0135481, from hereinafter "Conwell").

Tuttle teaches an electrically powered postage stamp operative with radio frequency communication. Further, the electrically powered postage stamp and an electrically powered mailing label, each of which include, in combination, an integrated circuit chip having an RF transceiver constructed therein; a thin flat battery cell connected to the IC chip for providing power thereto; and a thin film RF antenna

connected to the IC chip for transmitting data to and from the IC chip. All of the above components are connected in a very thin array and mounted between opposing major facing surfaces (as recited in claims 1 and 6) of either a postage stamp or a larger mailing or shipping label in a substantially two dimensional planar configuration. These components are operative to store data in the IC chip memory, which data includes such things as the destination address, return address, and descriptions of the contents of the article being mailed or shipped. These components are further operative in a novel system combination to transmit the stored data to an interrogating party upon receipt of RF interrogation signals transmitted to the stamp or label, or to receive data from same (see col 2, lines 25-44).

Regarding claim 1, Tuttle teaches a trackable postage stamp that comprises a first surface and a second surface opposite the first surface and adapted to adhere to a piece of mail, and an active RFID tracking device that includes stamp identification information (see Figures 1-2, col 2, lines 25-44, col 3 line 44 to col 4 line 30).

Regarding claim 1, Tuttle fails to teach that the tracking device is passive.

Conwell teaches a tamper evident smart label with an RF transponder. Conwell discloses that as shown in FIG. 1, one embodiment of the invention uses a label or tag material M1 made from a self-destructible material such as the 3M 7900, 7930 or 7610 ScotchMark Destructible White Vinyl or similar tamper-indicating materials designed to fracture or break apart when peeled up from a substrate 3. This label stock is imprintable on demand with thermal transfer ribbon ink, or it can be preprinted on a press using flexographic, letterpress, offset, rotogravure, screen, or other technology.

This label with adhesive 1 and release liner contains an embedded passive RFID transponder tag inserted such that it is sandwiched between the adhesive and the release liner. After printing, the label is removed from the release liner, which protects the label during printing and before application; the RF transponder remains attached to the adhesive 1 and is applied with the label to a substrate 3 (see Figure 1, paragraph 15). Hence, Conwell teaches the use of a passive RFID transponder tag that is embedded in a label which includes an adhesive.

In view of the teaching of Conwell, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a passive tracking device as opposed to an active tracking device because a passive tracking device is able to generate its own power without the use of an external battery or source, hence the transponder itself can be made smaller, which is favorable in the case of a postage stamp.

Regarding claim 3, Tuttle teaches that the tracking device is an RFID device (see Figure 1, col 3, lines 44-66).

Regarding claims 4-5 and 7, Tuttle discloses that the stamp ID information includes unique encrypted data corresponding to identification number, the sender's name, point of origin, weight, size, route, destination, and the like and that the encrypted data are combined to at least partially yield the stamp ID information (see col 3, lines 61-64).

Regarding claim 6, the tracking device is coupled to the second surface (see Figures 1-2, col 3 line 44 to col 4 line 30).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Conwell and further in view of Leon (U.S. Patent No. 6,701,304). The teachings of Tuttle/Conwell have been discussed above.

Regarding claim 2, Tuttle/Conwell fails to teach that each tracking device includes a barcode.

Leon teaches a method and apparatus for postage label authentication. Leon discloses that printers 154 and 170 can be specially designed printers or conventional printers. Printers 154 and 170 are capable of printing human-readable information, machine-readable information, and others. For example, the printers may be directed to print one-dimensional barcodes, two-dimensional barcodes, facing identification mark (FIM) markings, texts, and other graphics. In a specific embodiment, printer 154 is a specially designed printer that is used to print indicia and may be capable of printing other information such as address label, tax stamp, secured ticket, money order, and the like. One such printer is a thermal printer having a resolution of, for example, approximately 200 dots per inch (see Figure 1A, Figure 4, col 6, lines 28-40).

In view of the teaching of Leon, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a barcode on the tracking device because a barcode is conventionally known to be an efficient medium to store encoded information.

7. Claims 8, 10, 12-17, 19, 22, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle (U.S. Patent No. 5,497,140) in view of Levasseur et al.

(U.S. Patent No. 4,008,792, from hereinafter "Levasseur") and Fite et al. (U.S. Patent No. 6,467,684, from hereinafter "Fite").

Regarding claims 8 and 19, Tuttle teaches an electrically powered postage stamp operative with radio frequency communication. Further, the electrically powered postage stamp and an electrically powered mailing label, each of which include, in combination, an integrated circuit chip having an RF transceiver constructed therein; a thin flat battery cell connected to the IC chip for providing power thereto; and a thin film RF antenna connected to the IC chip for transmitting data to and from the IC chip. All of the above components are connected in a very thin array and mounted between opposing major facing surfaces (as recited in claims 1 and 6) of either a postage stamp or a larger mailing or shipping label in a substantially two dimensional planar configuration. These components are operative to store data in the IC chip memory, which data includes such things as the destination address, return address, and descriptions of the contents of the article being mailed or shipped. These components are further operative in a novel system combination to transmit the stored data to an interrogating party upon receipt of RF interrogation signals transmitted to the stamp or label, or to receive data from same (see col 2, lines 25-44).

Regarding claims 8 and 19, Tuttle fails to teach a postage stamp dispensing system and method that comprises a stamp dispenser to contain and dispense the stamps that have the tracking device.

Levasseur teaches vend control circuits capable of vending different quantities at different prices. Levasseur teaches that each pulse of the vendor control system 160

produces a separate bend operation, for example, each pulse can be used to dispense a postage stamp of some other item or service (see Figures 3-4, col 9, lines 10-27). Hence, Levasseur teaches that stamps are able to be vended.

In view of the teaching of Levasseur it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a vending machine to dispense stamps because this is an efficient and a convenient way for consumers to be able to purchase stamps when a conventional store is closed. Since the RFID components are embedded within the actual stamp, it is possible and feasible for them to be vended like any other item.

Further regarding claims 8 and 19, Tuttle as modified by Levasseur fails to teach a reader that is operatively associated with the stamp dispenser to read the stamp ID information when the relative position between the stamp and the reader changes and a database that is operable to store the read stamp ID information.

Fite teaches a pre-paid card system for purchasing products or services. Fite discloses in FIG. 1 reference numeral 10 generally indicates a prepaid card system according to the invention. The system 10 comprises a host database 12, a card vendor terminal 14, a merchant station 16 and a customer internet access terminal 18, as well as cash cards 20 for use with the system 10. One such card 20 is illustrated in FIG. 2. The cards 20 are typically of plastic and each card 20 is issued for a specific amount which is displayed on the face of the card 20, e.g. for the following denominations \$1, \$2, \$5, \$10, \$20, \$50, \$100 (FIG. 3). Each card 20 further has a unique identity number which is printed on the rear of the card 20, as indicated at 22 in FIG. 2 and covered with

a customer or user removable scratch off material, such as an opaque tape 24. Each card 20 is further provided with a magnetic strip 26, which is a read only memory containing the same identity number 22. The card vendor terminal 14 incorporates a computer which is linked through the Internet or other communication means to the host database 12. The terminal 14 has a card reader for reading the memory on the card 20, such as a swipe slot, for receiving the card 20 and reading the card identification number from the magnetic strip 26. The terminal 14 also includes a keypad for entering various alphanumeric or other control characters, as well as a display and modem, if necessary, for connection to the host database 12. A plurality of vendor terminals 14 are provided at various outlet locations conveniently situated for customers or users of the system to purchase the cards 20. At the time of purchase, the customer will select one or more of the cards 20 with the desired denominations. The cards 20 are inactive prior to sale and are activated when read by the card reader (FIG. 4). At this time, the terminal 14 conveys information to the host database 12 that the particular card 20 is now active. Effectively, the card 20 is now comparable to a bank note in the hands of a customer (see Figures 1 and 3-4, col 2 line 60 to col 3 line 30). Hence, Fite teaches a reader that is operatively associated with the pre-paid card dispenser dispenser to read the pre-paid card ID information when the relative position between the pre-paid card and the reader changes (i.e. when the card is purchased, activated, and removed from the vending machine), and a database operable to store the read card information.

In view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a reader to be able to read the

identification information and to be able to store it in a database because it is favorable to be able to track an object that has been purchased by a consumer to ensure correct handling and operation. In addition, it is appropriate to modify Tuttle/Levasseur with Fite because Tuttle/Levasseur teach a vending machine and system for vending stamps to be tracked, and Fite teaches a vending machine and system for vending pre-paid card that are also tracked, hence would have been obvious to one of ordinary skill in the art at the time the invention was made to vend stamps and pre-paid cards in the same manner.

Regarding claim 10, Tuttle teaches that the tracking device is an RFID device (see Figure 1, col 3, lines 44-66).

Regarding claims 12-13 and 22, Tuttle discloses that the stamp ID information includes unique encrypted data corresponding to identification number, the sender's name, point of origin, weight, size, route, destination, and the like and that the encrypted data are combined to at least partially yield the stamp ID information (see col 3, lines 61-64).

Regarding claim 14, Tuttle/Levasseur fails to teach that the encrypted data that makes up the stamp ID information is stored as separate values in the database.

Fite teaches that each card 20 has a unique identity number and information, and that the database 12 retains information about the particular card 20 that is now activated (see Figures 1 and 3-4, col 3, lines 1-29). Hence, Fite teaches that the database stores information separately about each particular card (i.e. stamp).

In view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a unique, individual database entry for each different piece of information so that accurate, up-to-date information can be obtained and does not get misconstrued and jumbled within a large database file.

Regarding claim 15, Tuttle as modified by Levasseur fails to teach that the dispenser is a vending machine wherein the reader is a part of the vending machine.

Fite teaches a system that employs vendor terminals and a reader that is part of the vendor terminal to dispense products (see Figures 1 and 3-4, col 2 line 60 to col 3 line 30).

In view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a vending machine with a reader because a vending machine is well known in the art to be an efficient way to dispense products to consumers when a store/sales associate is not available.

Regarding claims 16-17 and 26-28, Tuttle as modified by Levasseur fails to teach that the stamps are arranged in a book and the book includes book identification data which is able to be tracked.

Fite teaches that each card 20 has a unique identity number and information, and that the database 12 retains information about the particular card 20 that is now activated (see Figures 1 and 3-4, col 2 line 60 to col 3 line 30). The card's unique identity number can be applied the same way to a book of stamps and hence, it's individual stamps as well.

In view of the teaching of Fite, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a unique identity information data on the book of stamps, so like the pre-paid card, it can be tracked in order to verify the correct usage. It is favorable to be able to verify the correct usage of the stamp booklet so that no fraudulent activity is taking place.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Levasseur and Fite and further in view of Leon (U.S. Patent No. 6,701,304). The teachings of Tuttle/Levasseur/Fite have been discussed above.

Regarding claim 9, Tuttle/Levasseur/Fite fails to teach that each tracking device includes a barcode.

Leon teaches a method and apparatus for postage label authentication. Leon discloses that printers 154 and 170 can be specially designed printers or conventional printers. Printers 154 and 170 are capable of printing human-readable information, machine-readable information, and others. For example, the printers may be directed to print one-dimensional barcodes, two-dimensional barcodes, facing identification mark (FIM) markings, texts, and other graphics. In a specific embodiment, printer 154 is a specially designed printer that is used to print indicia and may be capable of printing other information such as address label, tax stamp, secured ticket, money order, and the like. One such printer is a thermal printer having a resolution of, for example, approximately 200 dots per inch (see Figure 1A, Figure 4, col 6, lines 28-40).

In view of the teaching of Leon, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a barcode on the tracking

device because a barcode is conventionally known to be an efficient medium to store encoded information.

9. Claims 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Levasseur and Fite and further in view of Conwell et al. (U.S. Patent Application Publication 2002/0135481, from hereinafter "Conwell"). The teachings of Tuttle/Levasseur/Fite have been discussed above.

Regarding claims 11 and 21, Tuttle/Levasseur/Fite fails to teach that the tracking device is passive.

Conwell teaches a tamper evident smart label with an RF transponder. Conwell discloses that as shown in FIG. 1, one embodiment of the invention uses a label or tag material M1 made from a self-destructible material such as the 3M 7900, 7930 or 7610 ScotchMark Destructible White Vinyl or similar tamper-indicating materials designed to fracture or break apart when peeled up from a substrate 3. This label stock is imprintable on demand with thermal transfer ribbon ink, or it can be preprinted on a press using flexographic, letterpress, offset, rotogravure, screen, or other technology. This label with adhesive 1 and release liner contains an embedded passive RFID transponder tag inserted such that it is sandwiched between the adhesive and the release liner. After printing, the label is removed from the release liner, which protects the label during printing and before application; the RF transponder remains attached to the adhesive 1 and is applied with the label to a substrate 3 (see Figure 1, paragraph 15). Hence, Conwell teaches the use of a passive RFID transponder tag that is embedded in a label which includes an adhesive.

In view of the teaching of Conwell, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a passive tracking device as opposed to an active tracking device because a passive tracking device is able to generate its own power without the use of an external battery or source, hence the transponder itself can be made smaller, which is favorable in the case of a postage stamp.

10. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Levasseur and Fite and further in view of Barcelou (U.S. Patent No. 6,048,271). The teachings of Tuttle/Levasseur/Fite have been discussed above.

Regarding claims 18 and 20, Tuttle/Levasseur/Fite fails to disclose that an imaging device is used to capture an image of the user of the stamp dispenser.

Barcelou teaches an automated league and tournament device. Barcelou discloses that in FIG. 1, a kiosk 10 is shown in perspective in which two play stations 12 are fitted with play controls 14, a smart card reader/encoder 16, a credit card reader 17, and a video command touchscreen 18. Play controls 14 govern play on a playing field 20 (the playing field itself is shown in greater detail in FIG. 6, below), and scoring is automatically calculated and communicated to a computerized control (not shown) interior to and/or exterior to the kiosk 10. The computerized control connects directly to the smart card reader/encoder 16, the credit card reader 17 and the video command screen 18. On a side of the kiosk 10 generally normal to the two play stations 12, an automated teller machine (ATM) 22 includes typical ATM hardware including a card

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reader (not shown), keyboard 24, instruction screen 26, bill dispenser 28 and receipt dispenser 30. The playing field 20 is covered by and protected by a penetration resistant dome 32 and a standard ATM/bank security camera 31 (see Figure 1, col 5, lines 25-45).

In view of the teaching of Barcelou, it would have been obvious to one of ordinary skill in the art at the time the invention was made employ an imaging system in order to have a record of who is purchasing and utilizing the vended product. This is favorable for adding security to the system (i.e. the person as well as the product are able to be tracked).

11. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle as modified by Levasseur and Fite and further in view of Porter (U.S. Patent No. 5,774,053). The teachings of Tuttle/Levasseur/Fite have been discussed above.

Regarding claims 23-25, Tuttle/Levasseur/Fite fails to disclose the confirmation of the delivery articles to the correct mailbox.

Porter teaches a storage device for the delivery and pickup of goods. Porter discloses that all embodiments of the storage device 10 broadly include an enclosure 14 for enclosing delivered goods or goods that are to be picked up and a communication apparatus 16 for controlling access to the enclosure 14 and for providing notification that goods have been delivered to or picked up from the enclosure 14 (see Figures 1-3, col 3, lines 55-60).

In view of the teaching of Porter, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a system to be able to confirm

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the delivery of the articles with the trackable stamps to ensure that a correct delivery was made (this includes determining if the mailbox location is more than a predefined distance from the dispensing location).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lisa M. Caputo** whose telephone number is **(571) 272-2388**. The examiner can normally be reached between the hours of 8:30AM to 5:00PM Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached at **(571) 272-2398**. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**lisa.caputo@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

me

LMC

April 15, 2004



DIANE I. LEE
PRIMARY EXAMINER